AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

1.   (Currently Amended) An image processing device comprising:

a first color detection means for detecting colors of [[a]] first image data by each processing unit, said first image data including data of a plurality of <u>foreground</u> objects <u>and grouping all of the detected colors of the plurality of foreground objects in the first image data into groups, each group containing a grouping of approximately equal colors from the plurality of foreground objects</u>;

a second color detection means for detecting colors of [[a]] second image data that serves as the first image data's background by each processing unit, the second image data having a plurality of different colors; and

means for ~~grouping all the colors of the plurality of objects in the first image data, which are not the same colors, into groups, each of which is for grouping approximately equal colors and~~ comparing<u>, for each group,</u> the approximately equal colors of ~~each~~ <u>the</u> group to all the colors of the second image data <u>that are adjacent to the first image data of the group</u> and for specifying a <u>single</u> uniform adjusting color ~~for each~~ <u>to be used for the group</u> ~~of the plurality of objects~~, that makes the first image data recognizable against all colors of the second image data that serve as the first image data's background.

2.   (Original) An image processing device as claimed in claim 1, further comprising:

an image synthesizing means for synthesizing the first image data converted into said adjusting color with said second image data.

3.   (Original) An image processing device as claimed in claim 1, wherein said processing unit is a pixel.

4.   (Previously Presented) An image processing device as claimed in claim 1, further comprising:

a first memory means for storing the colors of the first image data by each of the approximately equal colors; and

a second memory means for storing the colors of the second image data that serves as the first image data's background, said colors of which are correlated to each of the corresponding colors of the first image data that are stored in said first memory means; wherein

said grouping and specifying means includes an average color value calculating means for calculating an average value of all the colors of the second image data correlated to each of the colors of the first image data, and an adjusting color calculating means for calculating said adjusting color for each of the colors of the first image data based on each of the colors of the first image data and the average color value of the second image data calculated in correspondence with each of the colors of the first image data.

5.   (Original) An image processing device as claimed in claim 4, further

comprising:

a judging means for judging that colors of the first image data are

approximately equal when a sum of squares of the differences of their coordinate

values in a specified color system is less than a specified value.

6.   (Original) An image processing device as claimed in claim 4, wherein

said average color value calculating means calculates the average value of

the coordinate values of the colors of the second image data in a specified color

system.

7.   (Previously Presented) An image processing device as claimed in

claim 6, wherein

when a color of the first image data stored in said first memory means, an

average color value of the second image data calculated in correspondence with the

color of the first image data, and an adjusting color of the first image data are

expressed in the L*a*b* color system as (Ln, an, bn), (LAn, aAn, bAn), and (Lnc,

anc, bnc), as defined in the present specification;

said adjusting color calculating means calculates the (Lnc, anc, bnc) that

maximizes the value J in the following formulas:

$J = (Lnc - LAn)^2 + (anc - aAn)^2 + (bnc - bAn)^2$

$H = bn/an.$

8.   (Previously Presented) An image processing device as claimed in claim 6, wherein

when a color of the first image data stored in said first memory means, an average color value of the second image data calculated in correspondence with the color of the first image data, and an adjusting color of the first image data are expressed in the L*a*b* color system as (Ln, an, bn), (LAn, aAn, bAn), and (Lnc, anc, bnc), as defined herein the present specification;

said adjusting color calculating means sets

$anc = |\,an\,|$, when $aAn < 0$; $anc = -\,|\,an\,|$,when $aAn \geq 0$,

$bnc = |\,bn\,|$, when $bAn < 0$; $bnc = -\,|\,bn\,|$, when $bAn \geq 0$, and maximizes Lnc.

9.   (Original) An image processing device as claimed in claim 1, wherein said first image data is an image data that represents character images.

10.   (Previously Presented) An image processing device as claimed in claim 4, further comprising:

a third memory means for storing said second image data.

11.   (Original) An image processing device as claimed in claim 2, further comprising:

a file preparing unit for preparing an electronic file based on the image data synthesized by said image synthesizing means.

12.   (Original) An image processing device as claimed in claim 1, further comprising:

a scanner unit for obtaining said first image data and/or said second image data by means of reading a document.

13.   (Original) An image processing device as claimed in claim 2, further comprising:

a printer unit for printing images on recording media based on the image data synthesized by said image synthesizing means.

14.   (Currently Amended) A computer-readable storage device containing a program product for image processing that causes a computer to execute a process comprising the steps of:

detecting colors of a first image data by each processing unit, said first image data including data of a plurality of <u>foreground</u> objects;

<u>grouping all of the detected colors of the plurality of foreground objects in the first image data into groups, each group containing a grouping of approximately equal colors from the plurality of foreground objects</u>;

detecting colors of a second image data that serves as the first image data's background by each processing unit, the second image data having a plurality of colors; and

~~grouping the colors of the plurality of objects of the first image data, which are~~ ~~not the same colors, into groups, each of which is for grouping approximately equal~~ ~~colors and~~ comparing<u>, for each group,</u> the approximately equal colors of ~~each~~ <u>the</u>

group to all the colors of the second image data that are adjacent to the first image data of the group and specifying a single uniform adjusting color for each to be used for the group of the plurality of objects, that makes the first image data recognizable against all colors of the second image data that serve as the first image data's background.

15.   (Previously Presented) A computer-readable storage device containing a program product as claimed in claim 14, wherein said process further comprising the step of:

synthesizing the first image data converted into said adjusting color with said second image data.

16.   (Previously Presented) A computer-readable storage device containing a program product as claimed in claim 14, wherein

said processing unit is a pixel.

17.   (Previously Presented) A computer-readable storage device containing a program product as claimed in claim 14, wherein said process further comprises the steps of:

storing the colors of the first image data by each of the approximately equal colors into a specified memory means; and

storing the colors of the second image data that serves as the first image data's background, said colors of which are correlated to each of the corresponding

colors of the first image data that are stored in said specified memory means;

wherein

said step of specifying a uniform adjusting color includes the steps of:

calculating an average value of all the colors of the second image data correlated to

each of the colors of the first image data, and calculating said adjusting color for

each of the colors of the first image data based on each of the colors of the first

image data and the average color value of the second image data calculated in

correspondence with each of the colors of the first image data.

18.   (Previously Presented) A computer-readable storage device

containing a program product as claimed in claim 17, wherein said process further

comprises the step of:

judging that colors of the first image data are approximately equal when a

sum of squares of the differences of their coordinate values in a specified color

system is less than a specified value.

19.   (Previously Presented) A computer-readable storage device

containing a program product as claimed in claim 17, wherein

said step of calculating average value is for calculating the average value of

the coordinate values of the colors of the second image data in a specified color

system.

20.   (Previously Presented) A computer-readable storage device

containing a program product as claimed in claim 19, wherein

when a color of the first image data stored in said specified memory means, an average color value of the second image data calculated in correspondence with the color of the first image data, and an adjusting color of the first image data are expressed in the L*a*b* color system as (Ln, an, bn), (LAn, aAn, bAn), and (Lnc, anc, bnc), as defined in the present specification;

said step of specifying a uniform adjusting color is for calculating the (Lnc, anc, bnc) that maximizes the value J in the following formulas:

$$J = (Lnc - LAn)^2 + (anc - aAn)^2 + (bnc - bAn)^2$$

$$H = bn/an.$$

21.   (Previously Presented) A computer-readable storage device containing a program product as claimed in claim 19, wherein

when a color of the first image data stored in said specified memory means, an average color value of the second image data calculated in correspondence with the color of the first image data, and an adjusting color of the first image data are expressed in the L*a*b* color system as (Ln, an, bn), (LAn, aAn, bAn), and (Lnc, anc, bnc), as defined in the present specification;

said step of specifying a uniform adjusting color is for setting

anc = | an | , when aAn < 0; anc = − | an | ,when aAn $\geq$ 0,

bnc = | bn | , when bAn < 0; bnc = − | bn |, when bAn $\geq$ 0, and maximizing Lnc.

22.   (Previously Presented) A computer-readable storage device containing a program product as claimed in claim 14, wherein

said first image data is an image data that represents character images.

23.   (Previously Presented) A computer-readable storage device containing program product as claimed in claim 15, wherein said process further comprises the step of:

preparing an electronic file based on the image data synthesized at said step of synthesizing.

24.   (Currently Amended) An image processing method comprising the steps of:

detecting colors of a first image data by each processing unit, said first image data including data of a plurality of <u>foreground</u> objects;

<u>grouping all of the detected colors of the plurality of foreground objects in the first image data into groups, each group containing a grouping of approximately equal colors from the plurality of foreground objects;</u>

detecting colors of a second image data that serves as the first image data's background by each processing unit, the second image data having a plurality of colors; and

~~grouping the colors of the plurality of objects of the first image data, which are not the same colors, into groups, each of which is for grouping approximately equal colors and~~ comparing<u>, for each group,</u> the approximately equal colors of ~~each~~ <u>the</u> group to all the colors of the second image data <u>that are adjacent to the first image</u>

data of the group and specifying a single uniform adjusting color for each to be used

for the group of the plurality of objects, that makes the first image data recognizable

against all colors of the second image data that serve as the first image data's

background.

25.   (Original) An image processing method as claimed in claim 24, further

comprising the step of:

synthesizing the first image data converted into said adjusting color with said

second image data.

26.   (Original) An image processing method as claimed in claim 24,

wherein said processing unit is a pixel.

27.   (Currently Amended) An image processing device comprising:

a first color detector for detecting colors of a first image data by each unit of

first image data, said first image data including data of a plurality of foreground

objects and grouping all of the detected colors of the plurality of foreground objects

in the first image data into groups, each group containing a grouping of

approximately equal colors from the plurality of foreground objects;

a second color detector for detecting colors of a second image data that

serves as the first image data's background by each unit of second image data, the

second image data having a plurality of colors; and

a color adjusting circuit for grouping the colors of the plurality of objects of the

first image data, which are not the same colors, into groups, each of which is for

grouping approximately equal colors and comparing, for each group, the approximately equal colors of each the group to all the colors of the second image data that are adjacent to the first image data of the group and specifying a single uniform adjusting color to be used for the group for each of the plurality of objects, that makes the first image data recognizable against all colors of the second image data that serve as the first image data's background.

28.   (Previously Presented) An image processing device as claimed in claim 27, further comprising:

an image synthesizing circuit for synthesizing the first image data converted into said adjusting color with said second image data.

29.   (Previously Presented) An image processing device as claimed in claim 27, wherein said units are pixels.

30.   (Previously Presented) An image processing device as claimed in claim 27, further comprising:

a first memory for storing the colors of the first image data by each of the approximately equal colors; and

a second memory for storing the colors of the second image data that serves as the first image data's background, said colors of which are correlated to each of the corresponding colors of the first image data that are stored in said first memory; wherein

said color adjusting circuit includes an average color value calculating circuit

for calculating an average value of all the colors of the second image data correlated

to each of the colors of the first image data, and an adjusting color calculating circuit

for calculating said adjusting color for each of the colors of the first image data based

on each of the colors of the first image data and the average color value of the

second image data calculated in correspondence with each of the colors of the first

image data.

31.   (Previously Presented) An image processing device as claimed in

claim 30, further comprising:

a judging circuit for judging that colors of the first image data are

approximately equal when a sum of squares of the differences of their coordinate

values in a specified color system is less than a specified value.

32.   (Previously Presented) An image processing device as claimed in

claim 30, wherein

said average color value calculating circuit calculates the average value of the

coordinate values of the colors of the second image data in a specified color system.

33.   (Previously Presented) An image processing device as claimed in

claim 32, wherein when a color of the first image data stored in said first memory, an

average color value of the second image data calculated in correspondence with the

color of the first image data, and an adjusting color of the first image data are

expressed in the L*a*b* color system as (Ln, an, bn), (LAn, aAn, bAn), and (Lnc,

anc, bnc), as defined in the present specification;

said adjusting color calculating circuit calculates the (Lnc, anc, bnc) that

maximizes the value J in the following formulas:

$$J = (Lnc - LAn)^2 + (anc - aAn)^2 + (bnc - bAn)^2$$

$$H = bn/an.$$

34.   (Previously Presented) An image processing device as claimed in

claim 32, wherein when a color of the first image data stored in said first memory, an

average color value of the second image data calculated in correspondence with the

color of the first image data, and an adjusting color of the first image data are

expressed in the L*a*b* color system as (Ln, an, bn), (LAn, aAn, bAn), and (Lnc,

anc, bnc), as defined in the present specification;

said adjusting color calculating circuit sets

anc = | an | , when aAn < 0; anc = − | an | ,when aAn $\geq$ 0,

bnc = | bn | , when bAn < 0; bnc = − | bn |, when bAn $\geq$ 0, and maximizes Lnc.

35.   (Previously Presented) An image processing device as claimed in

claim 27, wherein said first image data is an image data that represents character

images.

36.   (Previously Presented) An image processing device as claimed in

claim 30, further comprising a third memory for storing said second image data.

37.　(Previously Presented)　An image processing device as claimed in claim 1, wherein the grouping means individually compares each of the first image data groups of colors to a value representing a combination of all of the colors of the second image data.

38.　(Previously Presented)　A computer-readable storage device containing a program product as claimed in claim 14, wherein each of the first image data groups of colors is individually compared to a value representing a combination of all of the colors of the second image data.

39.　(Previously Presented)　An image processing method as claimed in claim 24, wherein each of the first image data groups of colors is individually compared to a value representing a combination of all of the colors of the second image data.

40.　(Previously Presented)　An image processing device as claimed in claim 27, wherein the color adjusting circuit individually compares each of the first image data groups of colors to a value representing a combination of all of the colors of the second image data.